

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: August 19, 2003, 15:22:35 ; Search time 58 Seconds
(without alignments)
1709.818 Million cell updates/sec

Title: US-09-494-297-2

Perfect score: 3945

Sequence: 1 MKKTRFPNKLTNTQTVLS.....IAGISLGIGIHTIRIKHD 757

Scoring table:

BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 492763 seqs, 131003257 residues

Total number of hits satisfying chosen parameters: 492763

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published_Applications_AA:*

1: /cgn2_6/ptodata/2/pubpaa/US07_PUBCOMB.pep:*

2: /cgn2_6/ptodata/2/pubpaa/PCRT_NEW_PUB.pep:*

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11: /cgn2_6/ptodata/2/pubpaa/US09C_PUBCOMB.pep:*

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15: /cgn2_6/ptodata/2/pubpaa/US10C_PUBCOMB.pep:*

16: /cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pep:*

17: /cgn2_6/ptodata/2/pubpaa/US60_NEW_PUB.pep:*

18: /cgn2_6/ptodata/2/pubpaa/US60_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	152	3.9	1849	15 US-10-242-056-49	Sequence 49, Appl
2	152	3.9	2516	9 US-09-817-514A-2	Sequence 2, Appl
3	152	3.9	2516	15 US-10-242-056-47	Sequence 47, Appl
4	148	3.8	1183	10 US-09-870-759-45	Sequence 45, Appl
5	147	3.7	1349	9 US-09-815-242-5898	Sequence 5898, Ap
6	144.5	3.7	2344	9 US-09-815-242-13137	Sequence 13137, A
7	144.5	3.6	2297	15 US-10-245-802-20	Sequence 20, Appl
8	141	3.5	1167	9 US-09-815-242-11522	Sequence 11522, A
9	139.5	3.5	2366	15 US-10-011-366-10	Sequence 10, Appl
10	139	3.5	4590	15 US-10-160-758-13	Sequence 13, Appl
11	136.5	3.5	4590	15 US-10-160-758-14	Sequence 14, Appl
12	136.5	3.5	4590	15 US-10-060-036-157	Sequence 157, App
13	135	3.4	1228	10 US-09-117-447-2	Sequence 2, Appl
14	135	3.4	871	10 US-09-858-525A-2	Sequence 2, Appl
15	133.5	3.4			

16	131.5	3.3	921	10 US-09-117-447-6	Sequence 6, Appl
17	131	3.3	2119	12 US-09-769-744A-28	Sequence 28, Appl
18	129.5	3.3	836	10 US-09-858-525A-10	Sequence 10, Appl
19	129.5	3.3	886	11 US-09-769-787-126	Sequence 126, App
20	129.5	3.3	3063	15 US-10-177-293-63	Sequence 63, Appl
21	128	3.2	665	11 US-09-769-787-127	Sequence 127, App
22	128	3.2	1375	9 US-09-740-274-4	Sequence 4, Appl
23	128	3.2	1394	11 US-09-839-996-2	Sequence 2, Appl
24	128	3.2	1394	15 US-10-080-505-2	Sequence 2, Appl
25	128	3.2	1395	15 US-10-080-505-7	Sequence 7, Appl
26	127.5	3.2	461	14 US-10-011-588-5	Sequence 5, Appl
27	126.5	3.2	691	9 US-09-815-242-12339	Sequence 12339, A
28	126.5	3.2	822	10 US-09-981-9008-9	Sequence 9, Appl
29	126.5	3.2	1434	15 US-10-080-505-9	Sequence 9, Appl
30	125.5	3.2	841	9 US-09-815-242-5779	Sequence 5779, Ap
31	125.5	3.2	841	9 US-09-815-242-12751	Sequence 12751, A
32	125	3.2	833	9 US-09-844-281-1	Sequence 1, Appl
33	124.5	3.2	26926	10 US-09-759-5088-2	Sequence 2, Appl
34	124	3.1	1300	9 US-09-815-242-4903	Sequence 4903, Ap
35	124	3.1	1300	9 US-09-815-242-10906	Sequence 10906, A
36	123.5	3.1	3063	12 US-10-301-822-26	Sequence 26, Appl
37	123.5	3.1	3063	15 US-10-177-293-61	Sequence 61, Appl
38	122.5	3.1	722	9 US-09-815-242-10796	Sequence 10796, A
39	122.5	3.1	2383	9 US-09-912-020-302	Sequence 302, App
40	122	3.1	663	9 US-09-815-242-5350	Sequence 5350, Ap
41	122	3.1	663	9 US-09-815-242-12138	Sequence 12138, A
42	121.5	3.1	437	11 US-09-910-346C-19	Sequence 19, Appl
43	121.5	3.1	448	9 US-09-288-326-7	Sequence 7, Appl
44	121.5	3.1	449	14 US-10-011-588-47	Sequence 47, Appl
45	121.5	3.1	870	9 US-09-815-242-5493	Sequence 5493, Ap

ALIGNMENTS

US-10-242-056-49

Sequence 49, Application US/10242056

Publication No. US20030113323A1

GENERAL INFORMATION:

APPLICANT: Ensign, Jerald C

APPLICANT: Bowen, David J

APPLICANT: Petell, James

APPLICANT: Fattig, Raymond

APPLICANT: Schoonover, Sue

APPLICANT: Hirsch-Constant, Richard

APPLICANT: Orr, Gregory L

APPLICANT: Merlo, Donald J

APPLICANT: Roberts, Jean L

APPLICANT: Rochelleau, Thomas A

TITLE OF INVENTION: Insecticidal Protein Toxins from

TITLE OF INVENTION: Photobabds

NUMBER OF SEQUENCES: 88

CORRESPONDENCE ADDRESS:

ADDRESSEE: Dowelanco

STREET: 9330 Zionsville Road

CITY: Indianapolis

STATE: IN

COUNTRY: US

ZIP: 46268

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/10/242,056

FILING DATE:

CLASSIFICATION:

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/063,615

FILING DATE: 18-MAY-1993

PRIOR APPLICATION DATA:

Sequence 6, Appl

Sequence 28, Appl

Sequence 10, Appl

Sequence 126, App

Sequence 63, Appl

Sequence 127, App

Sequence 4, Appl

Sequence 2, Appl

Sequence 2, Appl

Sequence 7, Appl

Sequence 5, Appl

Sequence 12339, A

Sequence 9, Appl

Sequence 9, Appl

Sequence 5779, Ap

Sequence 12751, A

Sequence 1, Appl

Sequence 2, Appl

Sequence 4903, Ap

Sequence 10906, A

Sequence 26, Appl

Sequence 61, Appl

Sequence 10796, A

Sequence 302, App

Sequence 5350, Ap

Sequence 12138, A

Sequence 19, Appl

Sequence 7, Appl

Sequence 47, Appl

Sequence 5493, Ap

APPLICATION NUMBER: US 08/395,497
FILING DATE: 28-FEB-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/007,255
FILING DATE: 06-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/608,423
FILING DATE: 28-FEB-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/705,484
FILING DATE: 28-AUG-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/743,699
FILING DATE: 06-NOV-1996
ATTORNEY/AGENT INFORMATION:
NAME: Borucki, Andrea T.
REGISTRATION NUMBER: 33651
REFERENCE/DOCKET NUMBER: 50301E
TELECOMMUNICATION INFORMATION:
TELEPHONE: 317-337-4846
TELEFAX: 317-337-4847
INFORMATION FOR SEQ. ID NO: 49:
SEQUENCE CHARACTERISTICS:
LENGTH: 1849 amino acids
TYPE: amino acids
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
US-10-242-056-49

Query Match 3.98; Score 152; DB 15; Length 1849;
Best Local Similarity 18.38; Pred. No. 0.013;
Matches 146; Conservative 120; Mismatches 287; Indels 254; Gaps 37;

QY 157 AVYNGHPONANGMEGLEPLNARVQGE-AVWYSD-----NAPISNPDSFKRESE 208
DB 796 AQLNLNAPQGVSAIV-GLDYIQSKETPTYAOMENAGVLTAGLNSQANTLHAFLEDSR 854
QY 209 SNLVST---SOLSLMRQALQ-----LIDPNLA-----TKMPKQVPDDFOL----- 246
DB 855 SALSTYIIQVAKAAAIKSRDLYQLLDNQVSAIKTRIAEALIA-SIQLYVNRAL 913
QY 247 -SIFESDCKG-----DKYKGYQNLISGLGVLTAKPTPEDPPMPNPQOTTSVLI 295
DB 914 ENVEENANSGVISROFIDMDKYNKRSTWAGVSQLYVEPNYIDPTMRIGQTKMDALL 973
QY 296 RKVA-----IGDYSKLLEGATLQLTGDNNNSQARVE-----SSNDIGE- 334
DB 974 QSVSOSQNLADYEDAFMSYLTSTFEQVANLKVISAHNDINNDGTLTYFGLSETDAGEY 1033
QY 335 -----RIELSDGTYYLT-----ELNSPAG--YSIAEPTTFVEAGKYTI-IDGKOIE 379
DB 1034 YMSVDSHKNQDKFPAANAMSEMHKIDCPINPKSTIRPIYIK---SRLLMLEQKEIT 1090
QY 380 NPKKEIPEYVSVAIYNDFE-----EFSVLTQN-----YAKF 411
DB 1091 KQTNKSKDGYQTEFDYREELKLAHIRYDGTWNTPTTFDVNKKISELLEKRNRAAGLYCAG 1150
QY 412 YVAKN-----KNGSSQVYVCFNADLSPDSDGCKTMTMP----- 446
DB 1151 YQSEDLLVWFYMQOQDTLDSYKNASMOGLYIF-ADMAS-----KDMTPEOSNYYRDN 1201
QY 447 -----DEFTTGCVKYYTHLAGROLDFYTYVAPRDTDP 475
DB 1202 SYQOQFDNNVRVNNRRAEDYEIPSSVSKRDYGMWDYILSMYNGDIPIINTYKKAASDL 1261
QY 476 DTFLKHIKKYIEGY---REKGALEYSGLTETQLRAATQALAIYFTDSAEIDKOKLD 531
DB 1262 KIATISKRLRIIHNGYEGOKRNQCINMKYKGLDKFIVYTSIGVNPANSSNKKLAFYVYQ 1321
QY 532 YHGFQMDNSTLAVAKILVEYADSNPQLTDLDFIPNNK-----YQSLIGTQW----- 582
DB 1322 YSG-----NTSGLNOGRLL--FHRDTYTP--SKVEAWIPGAKRSLITNOMAAIGDYATDSL 1373

QY 583 -HPEDLVDIIMEDKKEVI-----PYTHNLTL---RKTVTGADRRKDFE----- 626
DB 1374 NKPDDLKQYLFMTDSKGTADVSGPVEINAIISAKAQIIVYKAGKEQOTTFADDSVIO 1433
QY 627 -----TELANNKOELLQVTKDKTNLEF-KDQK-----ATINKHG 662
DB 1434 SPSEDMNQQYFNALEIDGSGLNFINNSASIDVFTAFADGGRKLGYESFSIPVLYKYSTD 1493
QY 663 ESLTQGLPBGYSTLYVETSEGGYKAVNS---QEVANATVSKTGITSDETLAFFENKE 718
DB 1494 NALTIHNENGAQYV---OMQSYRTRLNLTFLFARQLVARAT---TGIDITILSMETQIOE 1546
QY 719 PVVPTGVQDKINGLYALIVAGISLIGWG 747
DB 1547 P-----QLCKGFYATFVIPPYNLSTHG 1568

RESULT 2
US-09-817-514A-2
Sequence 2, Application US/09817514A
Patent No. US20020078478A1
GENERAL INFORMATION:
APPLICANT: Firench-Constant, Richard
APPLICANT: Bowen, David
APPLICANT: Rocheleau, Thomas
APPLICANT: Waterfield, Nicholas
TITLE OR INVENTION: DNA SEQUENCES FROM PHOTORHABDUS LUMINESCENS
FILE REFERENCE: 61645
CURRENT APPLICATION NUMBER: US/09/817,514A
CURRENT FILING DATE: 2000-03-26
PRIOR APPLICATION NUMBER: US 60/191806
PRIOR FILING DATE: 2000-03-24
NUMBER OF SEQ. ID NOS: 8
SOFTWARE: PatentIn version 3.0
SEQ. ID NO 2
LENGTH: 2516
TYPE: PRT
ORGANISM: Photorhabdus luminescens
US-09-817-514A-2

Query Match 3.98; Score 152; DB 9; Length 2516;
Best Local Similarity 18.38; Pred. No. 0.021;
Matches 146; Conservative 120; Mismatches 287; Indels 254; Gaps 37;

QY 157 AVYNGHPONANGMEGLEPLNARVQGE-AVWYSD-----NAPISNPDSFKRESE 208
DB 884 AQLNLNAPQGVSAIV-GLDYIQSKETPTYAOMENAGVLTAGLNSQANTLHAFLEDSR 942
QY 209 SNLVST---SOLSLMRQALQ-----LIDPNLA-----TKMPKQVPDDFOL----- 246
DB 943 SALSTYIIQVAKAAAIKSRDLYQLLDNQVSAIKTRIAEALIA-SIQLYVNRAL 1001
QY 247 -SIFESDCKG-----DKYKGYQNLISGLGVLTAKPTPEDPPMPNPQOTTSVLI 295
DB 1002 ENVEENANSGVISROFIDMDKYNKRSTWAGVSQLYVEPNYIDPTMRIGQTKMDALL 1061
QY 296 RKVA-----IGDYSKLLEGATLQLTGDNNNSQARVE-----SSNDIGE- 334
DB 1062 QSVSOSQNLADYEDAFMSYLTSTFEQVANLKVISAHNDINNDGTLTYFGLSETDAGEY 1121
QY 335 -----RIELSDGTYYLT-----ELNSPAG--YSIAEPTTFVEAGKYTI-IDGKOIE 379
DB 1122 YMSVDSHKNQDKFPAANAMSEMHKIDCPINPKSTIRPIYIK---SRLLMLEQKEIT 1178
QY 380 NPKKEIPEYVSVAIYNDFE-----EFSVLTQN-----YAKF 411
DB 1179 KQTNKSKDGYQTEFDYREELKLAHIRYDGTWNTPTTFDVNKKISELLEKRNRAAGLYCAG 1238
QY 412 YVAKN-----KNGSSQVYVCFNADLSPDSDGCKTMTMP----- 446
DB 1239 YQSEDLLVWFYMQOQDTLDSYKNASMOGLYIF-ADMAS-----KDMTPEOSNYYRDN 1289

QY 447 -----DFTTGEVKYTHIAGRDLFKYTVKPRDTP 475
DB 1290 SYQGFDTNNVRNRRVNAEDYEIPSSVSSRKDYLGWGYLLSMVYNGDIPTINYKASSDL 1349
QY 476 DTFLEKHKVIEKGY-----REKGOAIEVSGLTETOLRAATOLAIYFFDSAELEDKDKLD 531
DB 1350 KIYISPKRLIITHNGYEGOKRQCNLMNKYKLGDKFYITSLGVNPNSSKLMKFYPYQ 1409
QY 532 YHFGDMNDSTLAAKILVEAODSNPQLTDLDFEIPNNK-----YOSLIGTOW----- 582
DB 1410 YSG-----NTSGLNGRLL--FHRDTYTP--SKVEMWPGAKRSLTNOAAIGDDYATDSL 1461
QY 583 -HPEDVDIIRMEDEKKEVI-----PYTHNLTL-----RKVTGLADRTKDFHFE----- 626
DB 1462 NKPDCLKOYIMFTDSKGTADVSGVEINTAISPAKVQIYKAGKEQTFADKDVSTOP 1521
QY 627 -----TELKNNKELLSSQYVTKTKNLEF--KDGK-----ATINLKHG 662
DB 1522 SPSEFDMYOPNAEIDSGSLNFTNNSASIDVTFEAFADERKLGYESFSIPVTLKYSTD 1581
QY 663 ESLTLQGLPEGYSYLKRETDSEGYKVKVNS-----QEVNATVSKTGITSDETLAFENKE 718
DB 1582 NALTLLHNENGAQTM-----QMOSTRRLTLTLPAROLVARAT--TGIDTILSMETONIOE 1634
QY 719 PVVPTGVDOKINGYALIVAGISLGWIG 747
DB 1635 P-----QLGKGFTVTFVIPPYNLSTHG 1656

RESULT 3
US-10-242-056-47

Sequence 47, Application US/10242056

Publication No. US20030113323A1

GENERAL INFORMATION:

APPLICANT: Ensign, Jerald C

APPLICANT: Bowen, David J

APPLICANT: Petell, James

APPLICANT: Fatly, Raymond

APPLICANT: Schoonover, Sue

APPLICANT: ffrench-Constant, Richard

APPLICANT: Orr, Gregory L

APPLICANT: Merlo, Donald J

APPLICANT: Roberts, Jean L

APPLICANT: Rochelleau, Thomas A

TITLE OF INVENTION: Insecticidal Protein Toxins from

NUMBER OF SEQUENCES: 88

CORRESPONDENCE ADDRESS:

ADDRESSEE: DOWLANCO

STREET: 9330 Zionsville Road

CITY: Indianapolis

STATE: IN

COUNTRY: US

ZIP: 46268

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION NUMBER: US/10/242,056

FILING DATE:

CLASSIFICATION:

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/063,615

FILING DATE: 18-MAY-1993

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/395,497

FILING DATE: 28-FEB-1995

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 60/007,255

FILING DATE: 06-NOV-1995

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/608,423
FILING DATE: 28-FEB-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/705,484
FILING DATE: 28-AUG-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/743,699
FILING DATE: 06-NOV-1996
ATTORNEY/AGENT INFORMATION:
NAME: Borucki, Andrea T
REGISTRATION NUMBER: 33651
REFERENCE/DOCKET NUMBER: 50301E
TELECOMMUNICATION INFORMATION:
TELEPHONE: 317-337-4846
TELEFAX: 317-337-4847
INFORMATION FOR SEQ ID NO: 47:
SEQUENCE CHARACTERISTICS:
LENGTH: 2516 amino acids
TYPE: amino acids
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
US-10-242-056-47

Query Match 3.9%; Score 152; DB 15; Length 2516;
Best Local Similarity 18.3%; Pred. No. 0.021;
Matches 148; Mismatches 287; Indels 254; Gaps 37;

QY 157 AVMTNGHPONANGIMELEPLNAINVTQE-AWYYSD-----NAPISNDESEKRRSE 208
DB 884 AQLNLVAPQGVSAIV-GLDYIOMSKMETPTVAQWENAAAGVLVAGLNSQQAANTLHAFLEDSR 942
QY 209 SNLYST-----SOLSLMROLKO-----LIDPMLA-----TKMPKQVPDPOL----- 246
DB 943 SAALSTYYIRQVAKAAAKIKSRDLYOYLLIDNOVSAIAIKTTRIAEATA-SIOLVYNRAL 1001
QY 247 -SIFESDEK-----DKYNGYQNLISGLVPTKPPTPGPPPPQPOPTSVLI 295
DB 1002 ENVEENANSVVISROFFIDMPKRYNKRYSTMAGVSQVLYPPENYIDPTKRIQTKMMALL 1061
QY 296 RKYA-----IGDYSKLEGATLOLTGDNVSFOARVE-----SSNDIGE 334
DB 1062 QSVSOSQLNADTVEDAFMSYLTSPFQVANLKVISAHNNINNDGLTFIGLSETDAGEY 1121
QY 335 -----RIELSDGTYTL-----ELNSPAG--YSIAPPTFKYKAGVYIT-IDGKQIE 379
DB 1122 YWRSVDHSHKENDGKFAANAMSEWHKIDCPINPYKSTIRPVYK--SRLLYLLMLEQKEIT 1178
QY 380 NPNEKIYEPYSVEAVNDFE-----EFSVLTTQN-----YAKF 411
DB 1179 KOTGNSKDGYOETIDRYELALHRIYGTWNTPTTPPVNKKISLEKLEKRRARGLYCAG 1238
QY 412 YVARN-----KNGSSQVYVCFNADLKSPDSEDGKTMTPT----- 446
DB 1239 YQGEDTLVLMFYNOODTLDSYKKNASMQCLYIF-ADMAS-----KMTPEQSNVYRDN 1289
QY 447 -----DFTTGEVKYTHIAGRDLFKYTVKPRDTP 475
DB 1290 SYQGFDTNNVRNRRVNAEDYEIPSSVSSRKDYLGWGYLLSMVYNGDIPTINYKASSDL 1349
QY 476 DTFLEKHKVIEKGY-----REKGOAIEVSGLTETOLRAATOLAIYFFDSAELEDKDKLD 531
DB 1350 KIYISPKRLIITHNGYEGOKRQCNLMNKYKLGDKFYITSLGVNPNSSKLMKFYPYQ 1409
QY 532 YHFGDMNDSTLAAKILVEAODSNPQLTDLDFEIPNNK-----YOSLIGTOW----- 582
DB 1410 YSG-----NTSGLNGRLL--FHRDTYTP--SKVEMWPGAKRSLTNOAAIGDDYATDSL 1461
QY 583 -HPEDVDIIRMEDEKKEVI-----PYTHNLTL-----RKVTGLADRTKDFHFE----- 626
DB 1462 NKPDCLKOYIMFTDSKGTADVSGVEINTAISPAKVQIYKAGKEQTFADKDVSTOP 1521
QY 627 -----TELKNNKELLSSQYVTKTKNLEF--KDGK-----ATINLKHG 662

Db 1522 SPSEDEMNQFNALEIDSGLNFINNSASIDVFTAFADGKRLGYESFIPYTLKVDSTD 1581
Qy 663 ESTLLOGLPEGYSLYKVEETDSEGYKRVN-----QEVANATVSKTISGSETLAFENKKE 718
Db 1582 NALTLHNENGAQYM-----OMOSYFRRLNLFARQOLVARAT---TGIDTLLSMETONIOE 1634
Qy 719 PVVPTGVOKINGYLALIVAGISLGIMG 747
Db 1635 P-----QLGKGFEYATFVLPYNLSTHG 1656

RESULT 4
US-09-870-759-45
; Sequence 45, Application US/09870759
; Patent No. US20020177551A1
; GENERAL INFORMATION:
; APPLICANT: TERMAN, David S
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR TREATMENT OF NEOPLASTIC DISEASE
; FILE REFERENCE: 870759
; CURRENT APPLICATION NUMBER: US/09/870,759
; CURRENT FILING DATE: 2002-01-14
; PRIOR APPLICATION NUMBER: US 60/208,128
; PRIOR FILING DATE: 2000-05-30
; NUMBER OF SEQ ID NOS: 166
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 45
; LENGTH: 1183
; TYPE: PRF
; ORGANISM: Staphylococcus aureus
US-09-870-759-45

Query Match 3.8%; Score 148; DB 10; Length 1183;
Best Local Similarity 19.7%; Pred. No. 0.013;
Matches 165; Conservative 123; Mismatches 299; Indels 252; Gaps 44;

Qy 64 PDSSSEYRWY-----GYESYRGHPHYK-----QFRVAHDLRVNLEGSRY-----QYCYF 109
Db 182 PEDTTHVRWFLNNINNEKSYVSKDITTKDIOGGCQDLSTLNTINVTGTHSNYSQGSAT 241
Qy 110 NLKKAFFLG-----DSSVKKWKYKHKDGSIKRPFEDYAMSPRITG----- 148
Db 242 DEKAPR-GSKITVDTKTNTIDVTIPQIGSYNSFSINYK-----TKITNEQKEFYVNS 295
Qy 149 -----DELNOKLRAVYNGHPONANGIMEG-----LEPNAIRVQEAUYSDNA 194
Db 296 QAWYQEGKREYVNGK--SENHTVHNINANGIEGYKGLKVLKQDDTK-----A 344
Qy 195 PISNPDESK-RSESNLVSTSQLSMRQALKQOLIDPNLATKMPKOVDDFOLSTFSE- 252
Db 345 PIAN--VKFKLSKKDSVVDNQ-----KEIEITDANGIANIKALPSGDYILKEIEAPR 397
Qy 253 ----DKGDKY-----MKGYONLSGGL-----VPTKPTPDGPPRPPOPTTSV 293
Db 398 PYTFDDKEYPTPMKDTDNGYFTTLEMNAKIEKTDVSAQKWEYGQYKP-----TI 451
Qy 294 LIRKVAIGYS-----KLLEGATLQLTGDVNSFOARVSSND-IGERLELSDGT 342
Db 452 YFKLYKQODNQNTTPYDKAEIKKLEDDGTTKYVMSNL-----PENDKKGAIK----- 488
Qy 343 YLTLELN-----SPAGYSIAE-----PI-TFKYVAGKVYTTIIGKOIENPKET 385
Db 499 YLWKEVNAQGEDTTPGTYRKENGVLVNTKEPIETTSISGEKAWMDKQDQKRPBK-- 556
Qy 386 VEYSEAYNDFEEFVLTONAKFY-----AKKNSSQVYVYCPNADLKSPDSEDG 440
Db 557 ---VSVNLANGKRVKTLDTVSETNMKYERKDLPKYDEG-KKIEYTVEDHVADYTTDIN 612
Qy 441 GKTMTDETTGEKRYTHIAGRDLFKYTVKPRDTPDLFLKHKKVTEK----- 488
Db 613 GTTITTKYTPGESATVTKMNDNNODGKRPFIEIVELYQDGAKAQKTAILESNMWH 672
Qy 489 ----GYREKGAIEYSGLETOLRATQ-----LAIFYETDSALDKDLKDY 532

Db 673 TWTGLDEKAGQOQVYKVEELFTYKGYTTHVDNNDMGNLIVTKYPPETTSISGEKWD- 731
Qy 533 HGGGDMDNDSLAAKILVEAODSNPQOLDLDEFFIPNNKXSL---ISTOMHPEDLVD 589
Db 732 ----DKNN-----QDGKREKYSVN-LIADGKRVKTLVDYVSTNNKYE-FKD 772
Qy 590 IIRMEDKEVIVPYTHNLTKRYTGTGLADRTKDFHEIE-----LKNKQELLQOTVKT- 643
Db 773 LPKYDECKRI-----EYTV---EDHVKDYTTIDINCTTITNKTTPETSATVTKNM 820
Qy 644 -DKTNLE-----FKDGKAT-----INLKHGESYTLQGLPE-----GYSLVKE- 660
Db 821 DDNNNDGKRPTTEIKVELLYQDGRKATGTALINESNMNTHWTGLDEKAGQOQVYKVEEL 880
Qy 681 TDSEGYKRVKNSQEVANATYSK-----TCITSDETLAFENNKEPVVPTGVDDKI--NG 731
Db 881 TKVKGYYTHVDNNDMGNLIVTKYTPETTSISEKVDKQDQKRPKREYVNLANG 939

RESULT 5
US-09-815-242-5898
; Sequence 5898, Application US/09815242
; Patent No. US20020061569A1
; GENERAL INFORMATION:
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Karl L.
; APPLICANT: Zyskind, Judith W.
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John D.
; APPLICANT: Carr, Grant J.
; APPLICANT: Yamamoto, Robert T.
; APPLICANT: Xu, H. Howard
; TITLE OF INVENTION: Identification of Essential Genes in
; TITLE OF INVENTION: Prokaryotes
; FILE REFERENCE: ELITRA.011A
; CURRENT APPLICATION NUMBER: US/09/815,242
; CURRENT FILING DATE: 2001-03-21
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; NUMBER OF SEQ ID NOS: 14110
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 5898
; LENGTH: 1349
; TYPE: PRF
; ORGANISM: Staphylococcus aureus
US-09-815-242-5898

Query Match 3.7%; Score 147; DB 9; Length 1349;
Best Local Similarity 20.2%; Pred. No. 0.019;
Matches 203; Conservative 91; Mismatches 338; Indels 372; Gaps 44;

Qy 8 NKLNTLNTORVLSKNS--KRFYTVLVGVFLMIFALVTSNMGATVYGLYESSIP----- 59
Db 208 NSNNENNADIIILKSTAPKRLNTR-----MRIAAYOPSSTEAKNVNDLITSNTTLRVVDA 262
Qy 60 ---NALNP--DSSSEYRWYGYESYVRGHPYKQFRVAHDLRVNLEGSRSYQVCFNLKKA 114
Db 263 DKNNKIVPADYVLSLSQITVDKVKSGDYF-----TIKYSDVYQVGLNPEDI 311
Qy 115 FPLGS-----DSSVKKWKYKHKD-----ISTKFEEDYAMSPRITGDELNOKLRAVYNGH--- 163

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Db 312 KNIGDICKPNNGETIATKHDPTANLITYFTDY-----DRNSQMGINSIYDA 364
Oy 164 ---PQANGIMEGLEPLAIRVTOEAVVYYSNAPDESFKRESNL-----211
Db 365 DTIPVSKNDVEFNVTIGTTTKTTANIOYPPYVNEKNSISAFETVSHGNKENPGY 424
Oy 212 -----VSTQSLSMRQALK-----QIDPNLATKMPKQVPPDFQLSIFSEDKGDKYNGY 262
Db 425 KQTIYVNSSENSLTNAKLKQVAYHSSYPNNIGQIKKDYTD---IKIYO-VRKGYTLNKG 480
Oy 263 QNLISGLVPTKPPTPGDPMPMPQPTSVLIRKAYAGDSK-----305
Db 481 D-----VNTKELT-----DVTNOLQKITTYGDNNSAVIDFGNADSAVVMVN 522
Oy 306 -----LLEGATLQLTGD-----NV 319
Db 523 TKFOYTNSPPLVOMATLSSTGNKSVSTGNALGFTNNQSGAGQGVYKIGNYWEDY 582
Oy 320 NSFO-----ARFSSN---DIGERIELSDGYTLTEL-----NSPAGYS 355
Db 583 NGVOELGKGVGNVTVYFDNNTNTKVEAVTKEDGSYLINLPNGDYRVERSNLPGYE 642
Oy 356 IAE-----358
Db 643 VTPSKQGNNEELDSNGLSVTVNGKDNLSADLGITRKPNLCOYWEDYTKNGIQODE 702
Oy 359 -----PTFRVEAGKY---TIDGR-----QIENPKKEIPEPSVAYVND 397
Db 703 KGISGVVTLTKDENGDVLKVTTPDADGKYKFTDLHNGYKVEFTTPEGYTPTTVYSGSDI 762
Oy 398 EEFV-VLTONTY-----AKFYAKNNKNGSSQVYVCNADLKSPDSED---GGKT 443
Db 763 EKDSNGLTGTVINGADNMTLDSGFKTPKYNLGNVWEDYTKNGQO---DSTKSGISVT 820
Oy 444 MTPPTGGEVYKTHIAGRD-LFKYTVKPRDTPDFLKHKKVLEKGYREKQALEY---499
Db 821 VTLKNGEVLQTKTKDKDKYQFT-----GLENGTYKVEFETP 859
Oy 500 SGLTETOLRAATOLAI-YYFTDSAEELDKD-----LMDY-----HGF 536
Db 860 SGYPTQVSGSTDEGIDNSGTSTGVIKDKNDFTIDSGFKPYTLGQVWEDYTKNGQV 919
Oy 537 DMNSTALVA-----KILVEKQADSNNP-QLTDDFTIPNNKQSLIGTQWHE 586
Db 920 DKDKGSGSVTLKENDKVLKTVTIDENKGYQFTDL---NNGYK-----963
Oy 587 LVDTIRMEDKKEVIP-VTHNLTLRK-----TVTGL---AGDRKDFHEIELKNNKQEL 636
Db 964 ---VEFTPSGYPTSVTSNDPTEKOSNGLTITGVIKADADNMTLDSG---KTPKYSL 1016
Oy 637 -----LSQTVKTDKTNLEFRKDGKATINLHGESLTLQGLPEGYSYLKFTDSEGYVK 689
Db 1017 GDYVWYDSNKKDKODSTFEKIKDYKVTLLNEKGEVIGTTKIDENKGYCFDMLDSGYKVI 1076
Oy 690 VNSEVANATYKSKTISDTFLAFENKKEPVPTGVOKT-NGY 732
Db 1077 F--EKPAGLQVTVNTTEDKDKADGGEVDTITDHDFTLDNGY 1118

RESULT 6
US-09-815-242-13137
Sequence 13137, Application US/09815242
Patent No. US20020061569A1
GENERAL INFORMATION:
APPLICANT: Haselbeck, Robert
APPLICANT: Ohlssen, Karl L.
APPLICANT: Zyskind, Judith W.
APPLICANT: Wall, Daniel
APPLICANT: Trawick, John D.
APPLICANT: Carr, Grant J.
APPLICANT: Yamamoto, Robert T.
APPLICANT: Xu, H. Howard
```

```

; TITLE OF INVENTION: Identification of Essential Genes in
; FILE REFERENCE: ELITRA.011A
; CURRENT APPLICATION NUMBER: US/09/815,242
; PRIOR FILING DATE: 2001-03-21
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; NUMBER OF SEQ ID NOS: 14110
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 13137
; LENGTH: 1349
; TYPE: PRT
; ORGANISM: Staphylococcus aureus
US-09-815-242-13137

Query Match 3.7%; Score 147; DB 9; Length 1349;
Best Local Similarity 20.2%; Pred. No. 0.019;
Matches 203; Conservative 91; Mismatches 338; Indels 372; Gaps 44;

Oy 8 NKLNTLNTORVLSKNS--KRTVTLVGVFLMFLVTSNMGAKTVGLVSESTP-----59
Db 208 NSNNENMADILLPKSTAPKRLNTR-----MRLAAQPSSTKAKVNDLITSNTTLTVDA 262
Oy 60 ---NAINP---DSSSYRYWGYESYVRGHPYKQFVANDLRLVNEGSRYSOYCENLKA 114
Db 263 DKNKTIYRQDYLSLSKQITVDDKYSQDYF-----TIYSQTVQVYGLNPEDI 311
Oy 115 PFLGS---DSSVKMYRKHDS---ISTKEDYAMSPTIGDELNOKLRAYVNGH---163
Db 312 KNIGDICKPNNGETIATKHDPTANLITYFTDY-----DRNSQMGINSIYDA 364
Oy 164 ---PQANGIMEGLEPLAIRVTOEAVVYYSNAPDESFKRESNL-----211
Db 365 DTIPVSKNDVEFNVTIGTTTKTTANIOYPPYVNEKNSISAFETVSHGNKENPGY 424
Oy 212 -----VSTQSLSMRQALK-----QIDPNLATKMPKQVPPDFQLSIFSEDKGDKYNGY 262
Db 425 KQTIYVNSSENSLTNAKLKQVAYHSSYPNNIGQIKKDYTD---IKIYO-VRKGYTLNKG 480
Oy 263 QNLISGLVPTKPPTPGDPMPMPQPTSVLIRKAYAGDSK-----305
Db 481 D-----VNTKELT-----DVTNOLQKITTYGDNNSAVIDFGNADSAVVMVN 522
Oy 306 -----LLEGATLQLTGD-----NV 319
Db 523 TKFOYTNSPPLVOMATLSSTGNKSVSTGNALGFTNNQSGAGQGVYKIGNYWEDY 582
Oy 320 NSFO-----ARFSSN---DIGERIELSDGYTLTEL-----NSPAGYS 355
Db 583 NGVOELGKGVGNVTVYFDNNTNTKVEAVTKEDGSYLINLPNGDYRVERSNLPGYE 642
Oy 356 IAE-----358
Db 643 VTPSKQGNNEELDSNGLSVTVNGKDNLSADLGITRKPNLCOYWEDYTKNGIQODE 702
Oy 359 -----PTFRVEAGKY---TIDGR-----QIENPKKEIPEPSVAYVND 397
Db 703 KGISGVVTLTKDENGDVLKVTTPDADGKYKFTDLHNGYKVEFTTPEGYTPTTVYSGSDI 762
Oy 398 EEFV-VLTONTY-----AKFYAKNNKNGSSQVYVCNADLKSPDSED---GGKT 443
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ORGANISM: *Candida albicans*
US-10-245-802-20

Query Match	3.6%;	Score 141;	DB 15;	Length 2297;
Best Local Similarity	17.0%;	Pred. No. 0.14;		
Matches 114;	Conservative 113;	Mismatches 262;	Indels 180;	Gaps 27;

OY		116	PLGSDSSVKKKYYKKHHDIGSTFE--EDVAMSFRITGDENQKLRAVMNGHPQNMANGIEG	173
Dd		640	PEGDSDVIYIKEPHNPIYTTLTKFSESFATLETITL-----NYEGDTSIV-	684
OY		174	LEPINAIRVTIOEAWWYYS-----NADISNPDESFKRESESINLVSTQSLSMROAL	224
Dd		685	REPNNPIYTTTE---FYSESFATLETITNGC-EGDGSIVAREPHNPIYTTLTFEFSERAT	740
OY		225	KOL-----DPNIATMPKOVPPDFOLSTIFESIEDKGDKYKGYONL-----	266
Dd		741	TETITNYPEGDSIVAREPH---NPIVTTLTFEFSERATETIYNYPEGDSIVAREPH	796
OY		267	-----SGGLVPTRPPPGDDPMPPNOPTTSLVLRKAIGDYSKLLLEGAT--LO	313
Dd		797	NPIYTTTFEFYSESFTTETITTG--PL-----GIDSIYI-----HPLLESSTAIPE	842
OY		314	LTDGNVSFOARVESNDIGERIELSOGTYLTLEINSBAGYSIAEPITEFKVEAKGVYTI	373
Dd		843	SSDNISNSIAOE--SSSSVEQSFTSADETSIVEILSRDIP-SSSIGILTSESSTVAS	899
OY		374	DGRKIENPKNEIPEPYVEAANDPEEPSVLTONYA-----KFYAKKN-N-GSQVVY	425
Dd		900	DYSSSTSSESIASSIDSYSSSIESTSSLDRISSISPTTSFYDSSSDLESTITY	959
OY		426	CFNADLK-----SPPSDEDGCKTMTPDETTEGKVYTHLAGRDLFXY-	466
Dd		960	SSSIDAOSHLVQSVSNSISFTSOEISSSSSEESTSATDALVSSDA--SSILSPOTSXY	1017
OY		467	--IVKRDRDPDFFLKHIIKVIKEGYRKGQALIEYSLGTQLRAAQILAAYTTDBAE	523
Dd		1018	PSSITSPSDDPEPHI-----AESDSQSISFITSTVEISSDVS	1056
OY		524	LDRKLDLYHGFGDMNDSTLAVAKILVEYAODSNPOLTDLDFIIPNNKKQSLIGTGMH	583
Dd		1057	LTPSPESPSSRLN-----SDSSSPSTDQRD--LITSFSFTLTKSSGS	1100
OY		584	PEDLYDIIRMDEKKEVIPYTHNLTKRTVTGLAGDRTKDFHEIELKNNKOLLISQTVKT	643
Dd		1102	RESSIGTILSESSDSIPTTFS-TRYXSPSCMSR----HYTNSTERVSVDVYSSVAG	1155
OY		644	DKTYLEFKDGKATINLKHGESLTLOGLEPGYSYLVKETDSDGYKKVAWSOEVANATVKT	703
Dd		1156	DETS-----ESSVSVISESESVESTSE-----SVASESVASESVASE	1191
OY		704	GITSDETLA	712
Dd		1192	SVASESVTA	1200
 RESULT 9 US-09-815-242-11522 Sequence 11522, Application US/09815242 Patent No. US20020061569A1 GENERAL INFORMATION: APPLICANT: Haselbeck, Robert APPLICANT: Ohlsem, Karl L. APPLICANT: Zysekund, Judith W. APPLICANT: Wall, Daniel APPLICANT: Trawick, John D. APPLICANT: Carr, Grant J. APPLICANT: Yamamoto, Robert T. APPLICANT: Xu, H. Howard TITLE OF INVENTION: Identification of Essential Genes in FILE REFERENCE: ELITRA.011A CURRENT APPLICATION NUMBER: US/09/815.242				

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, CURRENT FILING DATE: 2001-03-21
, PRIOR APPLICATION NUMBER: 60/191,078
, PRIOR FILING DATE: 2000-03-21
, PRIOR APPLICATION NUMBER: 60/206,848
, PRIOR FILING DATE: 2000-05-23
, PRIOR APPLICATION NUMBER: 60/207,727
, PRIOR FILING DATE: 2000-05-26
, PRIOR APPLICATION NUMBER: 60/242,578
, PRIOR FILING DATE: 2000-10-23
, PRIOR APPLICATION NUMBER: 60/253,625
, PRIOR FILING DATE: 2000-11-27
, PRIOR APPLICATION NUMBER: 60/257,931
, PRIOR FILING DATE: 2000-12-22
, PRIOR APPLICATION NUMBER: 60/269,308
, PRIOR FILING DATE: 2001-02-16
, NUMBER OF SEQ ID NOS: 1410
, SOFTWARE: FASTSEQ for Windows Version 4.0
, SEQ ID NO 11522
, LENGTH: 1167
, TYPE: PRT
, ORGANISM: Helicobacter pylori
US-09-815-242-11522

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Query Match	3.5%	Score 139.5;	DB 9;	Length 1167;
Best Local Similarity	19.1%;	Pred. No. 0.06;		
Matches 136;	Conservative 110;	Mismatches 282;	Indels 185;	Gaps 32;
QY	STOYVCFLLKAPFLPGSSVKKM-----YKKHD-----GISTPFEDYAMSPR	145		
DB	SYIALINITQA-KONRDSILAKFNKIALITSLDYLEKKNGVYIPGEYFEDLEKEKE	562		
QY	ITGDELNOKLRAVYNHGHQANQIM--EGLEPLNATRYQEAIVVYSDNAPISNPDES	202		
DB	IKTTMEKONIVII--GNPYSGSAKSENDNOMNISHPEKLEKRYEYETGKNSIAON----	616		
QY	FKRESSESIVSTQSLSLKRQALK-----QLIDPNLNTAKMPKQVPPDFOLSIRES	251		
DB	-KNSTRDTLHS--TRMSDLLKDGVLGCVYVNGSFIIDSKSDGRKCAVADFS-HLYAL	672		
QY	EDKGDYKNKGQYNLLSGGLVPEKTPGDPMPMPNOPTSVL-----IRKRYA	299		
DB	NLRGNARTSGBER-----KKQDGDGFDSGSRTYVALIFPVKDKADPNHTIFYYE	721		
QY	IGDYSKLLEGATLQITGDVNVNSFOARVSSNDIGERT-ELSDGYITTELNSPACYSIAE	358		
DB	VEDYLKREAKLNLNLANFENLDSVPEKFEITPNDKGIMQNRDDEKLLPLRKDKSKLFTN	781		
QY	PITKFEVREGVYTIIDGKIENPKKEIPEVSEVAYNEEFESVYLTQONAKFYAKKKN	418		
DB	AI-EDLNSNGVKTSD-----PM--VYNFSQRTLMQSVON-----	813		
QY	GSSQVYVCCFNADLK-----SPPSEDEGKTPDPFTTGEVKKYTHIAGRDLEKYYTV	468		
DB	-----CIDPYNADLKRFEFRFEARFQOPAKDKGIKSSAD-----RYKHLNDRREITTDKT	863		
QY	KPRQTDPRPTFLAKHKVYEKRYREKGAIEVSGLETPL--KAATQALAIYY--PIDS	521		
DB	KIAMIWDG--LKN-KLI-----KNEMLPSGEMERYVALIYRPNKQMLTWDKNLINRQ	912		
QY	AELDR--DK-----LKDYHGFDMNDSTSLAAKILVEYAAQDSNPQOLDLDFEITPNNNKY	574		
DB	SQLRKIPFDKARNAVINTGVNGCKRDFALYSDPISDSLSL-PMQATPLVYIIDLGIRY	971		
QY	QSLIGTQMHPELDVDIRMEDKKEVYIP-----VTNHLTLRKTVTGLAGDRTKDF	623		
DB	NAISGY-----ALNLFRRHYKDAALTEEELEFYUAIFFHHKGYLEKKNSLAKAPR--	1023		
QY	HFELELNKNKOELLQVYKTDKTNLEFDGKATINLKHG--ESLTLQGLPBGYSIVLYKET	681		
DB	-----IALSEDFKELNGLKELALHLNTEESGMHTSVKNNLLSAAEMGEY--YDYIOMKK	1077		
QY	DSEQYKVK-----VNSQEVANATVSKGTITSDETLAFENN	716		


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QY 47 AKTVEGLVSESTPAI---NPDSSSEYRWYGE-----SVYRGHPYYKQFVANDLRVNL 98
D 2573 AKDAGGVAFCTVAVIILTDNDNAPQPRATKYEVNIGSSAAKTSVKSASDAD----- 2626
QY 99 EGSRSYOVYCF-----NIKKAFLPGSDSVKKWKYKHDGISTKFEEDYAMSFRITGDEILNQ 153
D 2627 EGSNADITYAIEADSESVKENLEINKLSGVITTKESLIGLENEFFTF----- 2674
QY 154 KLRVMTNGHPQANNGIM-----EGLEP-----LNAIRYTOE 185
D 2675 -VRAV-DNGSPSKESVVLVYVKILPPEMQLPKFESEPYTTFTSDEVPVGTETIDILRAEHS 2732
QY 186 AWWYYS---DNAPISNDESEFKRESSENLVSTS-----QLSLMQALQOLDPN 231
D 2733 GTVYLISLVKGTNPESNDESEFVIDRQSGRLKLEKSLDHETTKWQFSLACTOD--DHE 2790
QY 232 LATMPKQVPDDFOLSTFSEEDKDKYNGK-----YONLSGLV-----PKRPTPG 279
D 2791 MVASV-----DVSIGVKANDANSVPFESSPYEAFIYENLPGGSRVIOIRASDADSGTNG 2844
QY 280 DPPRPNQOPOTTSVLRKRYAIGDYSKLLEGATL-QLTGDVNSFOARVSSNDIGERIEL 338
D 2845 QVMYSLDOSQVEV-IESFAINMETGWI--TTLKELDHEKRDNYQIKVVAS-DHGEKIOL 2900
QY 339 SDGT---YTLTELNSPAGYSIAEPIITFKVE-----AGVYTYII-----DGKQIE 379
D 2901 SSTAIVDYTYTDVND-----SPPRFAELIKGTVSDEDDQGVIALISTDADSEI- 2952
QY 380 NPKNIEVPYSVEAYNDFEESVLTTONYAKFYAKNKGSSQVYVCFNADLKSPDSED 439
D 2953 --NRQVT--YFITGDPFGQFAVETIQNEKMY-----YKRPDLREK 2990
QY 440 -GGKTMPPDFTTG-----EVKY-----THIAGRLKRYTKPRDTPDTLKHKK 484
D 2991 RDNVLTITATDGTFFSSKAIVEYKVLANDNSPVCERTLYSDTI-PEDVLP----- 3040
QY 485 VIEKGYREKGOAIEYSGLTETOLRAATOLAIFYFTDSAE-----LDKDK 528
D 3041 -----GKLMOISTADIDISNAEITTYLLGSGAEKRLKLPDGTGELKTSRPLDRE 3091
QY 529 LKDYH-----GFG-----DMNDST--LAVALIVEAODSNP-----POL 561
D 3092 QAVYHLLVRAVDGGRCQASIVVLTLEDVNDNAEFSDAPYATVFEFTEBGTLLTRQA 3151
QY 562 TDLDFFIPNNKKYSLIGT--QWHPEDVLIIME--DK-----EYIPYTHNL 608
D 3152 TDADAGL-NRKILYSLIDSADGQFSINELSGIIOLEKPLDRELQAVYTLISKAVDQGLPR 3210
QY 609 RKYVTGLA-----GDRTDHFHEIELKNNKOBELLSOT-----VKTDKTNLEF--- 650
D 3211 RLRTATGIVYIVLDINDNPPVFEYREGATVSEDLIVGTEVLOYVYASRDIEANAETIYS 3270
QY 651 -----KDKATINLKHSLSLLOGL---PEGSYLVKEND-----SEGKYKVNQSEV 695
D 3271 IISGENHGKTSIDSKTGAFFIENLDYESSHEIYLVLEATDGGCPSLSDVATVAVNVTDI 3330
QY 696 ANAT-----VSKTGITSDETLAEENKKEPVPTGVOKINGYIALIYIAG 740
D 3331 NDNTPFVSEODTYTIVISEDAVL--EOSVITVMADDAAGPSNHSIHYSIIDG 3379

RESULT 12
US-10-160-758-14
; Sequence 14, Application US/10160758
; Publication No. US20030036076A1
; GENERAL INFORMATION:
; APPLICANT: EXELIXIS, INC.
; TITLE OF INVENTION: CADS AS MODIFIERS OF THE P53 PATHWAY AND METHODS OF USE
; FILE REFERENCE: EX02-089C
; CURRENT APPLICATION NUMBER: US/10/160, 758
; CURRENT FILING DATE: 2002-06-03
; PRIOR APPLICATION NUMBER: US 60/296, 076
; PRIOR FILING DATE: 2001-06-05
```

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;; PRIOR APPLICATION NUMBER: US 60/328, 605
;; PRIOR FILING DATE: 2001-10-10
;; PRIOR APPLICATION NUMBER: US 60/357, 253
;; PRIOR FILING DATE: 2002-02-15
;; NUMBER OF SEQ ID NOS: 16
;; SOFTWARE: PatentIn version 3.1
;; SEQ ID NO 14
;; LENGTH: 4590
;; TYPE: PRT
;; ORGANISM: Homo sapiens
US-10-160-758-14

Query March 3.54; Score 136.5; DB 15; Length 4590;
Best Local Similarity 19.8%; Pred. No. 1;
Matches 176; Conservative 118; Mismatches 316; Indels 281; Gaps 46;

QY 47 AKTVEGLVSESTPAI---NPDSSSEYRWYGE-----SVYRGHPYYKQFVANDLRVNL 98
D 2573 AKDAGGVAFCTVAVIILTDNDNAPQPRATKYEVNIGSSAAKTSVKSASDAD----- 2626
QY 99 EGSRSYOVYCF-----NIKKAFLPGSDSVKKWKYKHDGISTKFEEDYAMSFRITGDEILNQ 153
D 2627 EGSNADITYAIEADSESVKENLEINKLSGVITTKESLIGLENEFFTF----- 2674
QY 154 KLRVMTNGHPQANNGIM-----EGLEP-----LNAIRYTOE 185
D 2675 -VRAV-DNGSPSKESVVLVYVKILPPEMQLPKFESEPYTTFTSDEVPVGTETIDILRAEHS 2732
QY 186 AWWYYS---DNAPISNDESEFKRESSENLVSTS-----QLSLMQALQOLDPN 231
D 2733 GTVYLISLVKGTNPESNDESEFVIDRQSGRLKLEKSLDHETTKWQFSLACTOD--DHE 2790
QY 232 LATMPKQVPDDFOLSTFSEEDKDKYNGK-----YONLSGLV-----PKRPTPG 279
D 2791 MVASV-----DVSIGVKANDANSVPFESSPYEAFIYENLPGGSRVIOIRASDADSGTNG 2844
QY 280 DPPRPNQOPOTTSVLRKRYAIGDYSKLLEGATL-QLTGDVNSFOARVSSNDIGERIEL 338
D 2845 QVMYSLDOSQVEV-IESFAINMETGWI--TTLKELDHEKRDNYQIKVVAS-DHGEKIOL 2900
QY 339 SDGT---YTLTELNSPAGYSIAEPIITFKVE-----AGVYTYII-----DGKQIE 379
D 2901 SSTAIVDYTYTDVND-----SPPRFAELIKGTVSDEDDQGVIALISTDADSEI- 2952
QY 380 NPKNIEVPYSVEAYNDFEESVLTTONYAKFYAKNKGSSQVYVCFNADLKSPDSED 439
D 2953 --NRQVT--YFITGDPFGQFAVETIQNEKMY-----YKRPDLREK 2990
QY 440 -GGKTMPPDFTTG-----EVKY-----THIAGRLKRYTKPRDTPDTLKHKK 484
D 2991 RDNVLTITATDGTFFSSKAIVEYKVLANDNSPVCERTLYSDTI-PEDVLP----- 3040
QY 485 VIEKGYREKGOAIEYSGLTETOLRAATOLAIFYFTDSAE-----LDKDK 528
D 3041 -----GKLMOISTADIDISNAEITTYLLGSGAEKRLKLPDGTGELKTSRPLDRE 3091
QY 529 LKDYH-----GFG-----DMNDST--LAVALIVEAODSNP-----POL 561
D 3092 QAVYHLLVRAVDGGRCQASIVVLTLEDVNDNAEFSDAPYATVFEFTEBGTLLTRQA 3151
QY 562 TDLDFFIPNNKKYSLIGT--QWHPEDVLIIME--DK-----EYIPYTHNL 608
D 3152 TDADAGL-NRKILYSLIDSADGQFSINELSGIIOLEKPLDRELQAVYTLISKAVDQGLPR 3210
QY 609 RKYVTGLA-----GDRTDHFHEIELKNNKOBELLSOT-----VKTDKTNLEF--- 650
D 3211 RLRTATGIVYIVLDINDNPPVFEYREGATVSEDLIVGTEVLOYVYASRDIEANAETIYS 3270
QY 651 -----KDKATINLKHSLSLLOGL---PEGSYLVKEND-----SEGKYKVNQSEV 695
D 3271 IISGENHGKTSIDSKTGAFFIENLDYESSHEIYLVLEATDGGCPSLSDVATVAVNVTDI 3330
QY 696 ANAT-----VSKTGITSDETLAEENKKEPVPTGVOKINGYIALIYIAG 740
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Db      3331 NDNTPVFSQDTYTTVISEDAYL--EQSVITVMADMDADGSPNSHIHYSIIDG 3379
RESULT 13
US-10-060-036-157
; Sequence 157, Application US/10060036
; Publication No. US20030073144A1
; GENERAL INFORMATION:
; APPLICANT: Benson, Darin R.
; APPLICANT: Kalos, Michael D.
; APPLICANT: Lodes, Michael J.
; APPLICANT: Persing, David H.
; APPLICANT: Hepler, William T.
; APPLICANT: Jiang, Yugu
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
; TITLE OF INVENTION: AND DIAGNOSIS OF PANCREATIC CANCER
; FILE REFERENCE: 210121.566
; CURRENT FILING DATE: 2002-01-30
; NUMBER OF SEQ ID NOS: 4560
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 157
; LENGTH: 4590
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-060-036-157

Query Match      3.5%; Score 136.5; DB 15; Length 4590:
Best Local Similarity 19.8%; Pred. No. 1;
Matches 176; Conservative 118; Mismatches 316; Indels 281; Gaps 46;

QY      47 AKTVFGLVESSTPNAL--NPDSSEYRMVGYE-----SYVRGHPYKOPRVVADHLKVLN 98
Db      2573 AKAGAGKACACTYVAVILTDNDNAPQFRATKYEVENIGSSAKGTSVYKSDAD----- 2626
QY      99 EGSRSYQVCF-----NLKAPPLGSDSVKWKYKHHGISTKFEEDYAMSPRITGDELNQ 153
Db      2627 EGSNADITYAHEADSESVKENLEINKISGVITTKESLIGLENEFFTF----- 2674
QY      154 KLRVAVYNGHROANGM-----EGLEP-----LNAIRYTOE 165
Db      2675 -VRAV-DNGSPSESVALYVYKLLPPEMQLPKFSEPEYTFYTSVEDVAVGTEDILIREHS 2732
QY      186 AWVYYS---DNAPISNPDESFKRESNLYSTS-----QLSLMQALKQLIDPN 231
Db      2733 GTVLVSLYKGNTPESNRDESFVIDRQSGRLKLEKSLDHEHTKMYQPSILARCQD--DHE 2790
QY      232 LATKMKQVDDPQLSFSEDEKDKYKNG-----YQNLISGLV-----PRKPPPG 279
Db      2791 MVASV-----DVSIQVKDANDNSPVFESSPYEAFIYENLPGGSRVYQIRASDADSGTNG 2844
QY      280 DPEMPNQPOTSVLLIRKKAIGDYSKLLEGATL-QLTGDVNVFQARVFESSNDIGRIEL 338
Db      2845 QVWYSLDQSOSEV-IESFAINMETGWT--TTIKELDHEKRDVYQIRKVAS--DHGEKIQL 2900
QY      339 SDGT---YTLTLENSPAGYSIAEPIYFKE-----AGKYVTII-----DGKQIE 379
Db      2901 SSFAIVDVAVTVND-----SPRFETAIYKGVISEDDPQGGVIAILSTTADSEI- 2952
QY      380 NPKEIVERYSVAYVNDPEEFESVLTQONAKFYAAKNNKSSQVYVCFNADLKSPDSED 439
Db      2953 --NRQVT--YFITGGDPLGFAVEITQIENKVKY-----YKPLDREK 2990
QY      440 -GGKTPPDETTG-----EVKY-----THIAGRLFKYTVKPRDIDPDTFLKHIK 464
Db      2991 RDNVLLITATDGFSSKALVEKVLADANDNSPVCERTYLSDTI--BEDVLP----- 3040
QY      485 VIEKGYRGOALEYSGITETOLARATOLAIYFTDSAE-----LDKDK 528
Db      3041 -----GKLMQISADDAIDIRNAEITTYTLGSGAEKFKLNPDTGELKTSTPLDRE 3091
QY      529 LADYH-----GFG-----DMNDST--LAVAKIIVEYADSNP-----POL 561

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Db      3092 QAVYHLLVRATDGGRCQASIVYTLLEDVNDNAPFESADPYALTFENTBPGLTRFYCA 3151
QY      562 TDDDFIPNNKQKSLIGT---QHPEDLYDIIRME---DKK-----EVIYVTHLTL 608
Db      3152 TDADAGL-NRKILYSLSDSADGQFSINELSGIILQLEKPLDREIQAVYTLSLKAVDGLPR 3210
QY      609 RKTVTGLA-----GDRTPDFHEIELKNNKQELISQ-----VKTDKTNLEF--- 650
Db      3211 RLATATGIVYSLDINDNPNPVFEYREYGAIVSDDILVGTREVLYVYASRIENAEITYS 3270
QY      651 -----KDKATINKHGESITLQGL---PEGYSLYKFTD-----SEGKYKAVNSQEV 695
Db      3271 IISGENHKFSISDKGAVFLIENLDYESSHEEYVLVEADGGTSPISDAVAVNVVTDI 3330
QY      696 ANMT-----VSKGTSDSETLAFENKKEPVYPTGVQKINGIALIYLIVNG 740
Db      3331 NDNTPVFSQDTYTTVISEDAYL--EQSVITVMADMDADGSPNSHIHYSIIDG 3379

RESULT 14
US-09-117-447-2
; Sequence 2, Application US/09117447
; Patent No. US20020168728A1
; GENERAL INFORMATION:
; APPLICANT: LOBITZ, Werner
; APPLICANT: SLEVET, Uwe
; APPLICANT: KUEN, Beatrix
; APPLICANT: TRUPPE, Michaela
; APPLICANT: HOMORKA, Stefan
; APPLICANT: RESCH, Stepanka
; APPLICANT: SCHROLL, Gerhard
; APPLICANT: SARA, Margit
; TITLE OF INVENTION: RECOMBINANT EXPRESSION OF S-LAYER PROTEINS
; FILE REFERENCE: 100564-08013
; CURRENT FILING DATE: 1998-12-02
; PRIOR FILING DATE: 1997-01-31
; PRIOR FILING DATE: 1997-01-31
; PRIOR FILING DATE: 1996-02-01
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: Patentln Ver. 2.1
; SEQ ID NO 2
; LENGTH: 1228
; TYPE: PRT
; ORGANISM: Bacillus stearothermophilus
US-09-117-447-2

Query Match      3.4%; Score 135; DB 10; Length 1228;
Best Local Similarity 19.3%; Pred. No. 0.15;
Matches 128; Conservative 88; Mismatches 230; Indels 216; Gaps 33;

QY      206 ESESINLYSTQSLSLMAQALKQLIDPNLATKMPKQVDDPQLSFSE--DKGDKYKNGYQN 264
Db      551 EKESGTVVASE-----LKYNDARKKWTLPK--ADLKEMTIYQIRIKKGLSKDGIE- 600
QY      265 LLSGGLVPTKPPPPMPNQPOTSVLIRKAYAGDSKLEGGATLOLT----- 315
Db      601 -----LGYNEKTYERTQDLTAPVIAVTSKN---GD-----AGLKYTEQETTVK 645
QY      316 GDNVNSFOARVFSSNDIG-----ERIELSDGTYTL----- 345
Db      646 SENLNTFNMTTVSGSITTYGQAVAVKAGANLSALFASDILIPASVEAVTGGDGTYYKVA 705
QY      346 TELNSPAGYSI-----AEPIYFKEVAGK---YTTI-IDGQIENPKKEIVERYSV 392
Db      706 NQLENRQGYKLVYFGKATAPVADANANLATAINYITFTTESGDTAPF--VTKYFKGD 763
QY      393 AYNDPEFESVLTQONAKFYAAKNNKSSQVYVCFNADLKSPDSEDGKTMPPDTTGE 452
Db      764 SLKDADAVTTLT-----NVDAGQKFTIQFSEELKTSGSLVGGKVT----- 804

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QY 453 VKYTHIAGRDLEFKYTVKPRODPPDPELKHKKVIEKGYREKGOAIEYSGLETQURAAQ 512
DB 805 -----VEKLTNGVNDAGTGTTVVAPKXTANGKVT 835
QY 513 LAIYFVDSAELEKD-KLK-----DYHFGDMNDSTLAVAKILEY-----A 553
DB 836 AAVYVLTGTLDNNDDAKRLVVDKSSDGIADVAGNVIKEDILIRYSWMRTVASVKA 895
QY 554 QDSNP-----POLTIDDFIIPNNKQSLIGTOMHEDLVDIIRMEDKKEVIPPYHNL 606
DB 896 ADKGOVNAASAFPTSTAD-----TKSLL-VEFNEDLAEV---KPEHVVYDAAGN 944
QY 607 TLKRTVGLAGDRTKDFEIELEKNNKQELLSQTV-----KT 643
DB 945 AVAGTVALDGS-TNKEVF-----TPSOELKAGTVYSVTIDGVRDKVGNITSKYITSFKT 998
QY 644 DKTN-----LEFKDKATINLKHGSLTQ---GLPEGYSYLKVTDESEGYK---VKVN 691
DB 999 VSANPTLSSISIAOG--AVNDRSKTITIEPSDSVPNP-TITLKADGSTFTNYTLVAVN 1055
QY 692 SOEVANATVSKTGITSDETLAF--NKEPVYPTGVOK---INGYAL--IVYAGISLG 744
DB 1056 NENYTKIVFHKGVTLEDTQYELAVSKDPOTGTIDSKVTITGSVATDEVKPPALVGVG 1115
QY 745 IW 746
DB 1116 SW 1117

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RESULT 15

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US-09-858-525A-2
: Sequence 2, Application US/09858525A
: Publication No. US20020199215A1
: GENERAL INFORMATION:
: APPLICANT: BOETS, Annemie
: APPLICANT: ARNAUT, Greta
: APPLICANT: VAN RIE, Jeroen
: APPLICANT: DAMEE, Nicole
: TITLE OF INVENTION: NO. US20020199215A1e1 Toxins
: FILE REFERENCE: 021565-077
: CURRENT APPLICATION NUMBER: US/09/858, 525A
: PRIOR FILING DATE: 2001-05-17
: PRIOR APPLICATION NUMBER: US 09/573, 872
: NUMBER OF SEQ ID NOS: 10
: SOFTWARE: PatentIn version 3.0
: SEQ ID NO 2
: LENGTH: 871
: TYPE: PRT
: ORGANISM: Brevibacillus laterosporus
US-09-858-525A-2

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Query Match 3.4%; Score 133.5; DB 10; Length 871;
Best Local Similarity 19.2%; Pred. No. 0.11;
Matches 172; Conservative 117; Mismatches 333; Indels 275; Gaps 45;

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QY 8 NKLMTLNTQRLVLSKRRFTVLGVF-----LMIFALVTSWVGAKTVFGLVSSSTP 59
DB 33 SKTQOIAITTTQASRDNQIDREGLLGYFKGDFNDLTLFAPTRD---NTL--IYDOOTA 86
QY 60 NAINPDSSEY--RWVG-YESYVGHYVYKQFRVHDLRVNLE-----GSRSTQY 106
DB 87 NTLVDQKHQEHYSIRWJIGLIOSATGD--FTFKLSDDENAIIELDGKVISEKGNKQSY 143
QY 107 YCFNLKAFPLGSDSSVKKYKKKHGISTKFEDEYAMSPRITGDELNOKLRAVMYNGHPON 166
DB 144 H--LEK---GQVQRIEYQSDALHIDNKIF-----KEL--KLFIKIDSQNHQ-- 185
QY 167 ANGIMEGLEPLNAIRVTOEAVWYSDNAPISNPDESFKRESESNLVSTQSLSLMFOALKQ 226
DB 186 -----OYOOD-----ELRNP--EFNKKETOVELKASKATNLFTQKTR 221
QY 227 LIDPNLATKMKQYVDDQSLIFSEEDK-----GDKYNGYQNLSSGLVPTKPTPGD 280

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DB 222 DIDEPTDID-GDSIFDVEENGTYIQNNVAAKWDLSLASKGQKRTSN---PLEAHYTG 277
QY 281 PMPPPNPOTTSVLLIRKVAICDYSKLLEGATLQLTGDVNV-----SFGARVSS 329
DB 278 P-----YSDYEKARDMPLSNKKEFENPLVAAFPVNVSLKVLISK 319
QY 330 N-DIGERIELESDGT---YTLNE-LNSPAGYSIAEP-----ITFK----- 363
DB 330 NEDLSHVSSESSOSTMSTYNTNEGTVNAGWSGLGFSFGVSYNOHSETVANEMGSAITNDG 379
QY 364 -----VEAGKYT-----TIIDKQI-----ENPKKEIYEP--- 388
DB 380 THINCAESAYLNAVRYNNGVGALEYERKPTTTSFLIDGTITIGTAKENTALTLLPOOS 439
QY 389 YSVE-----AYNDFEFS-----VLTQVYAKFYAKNNKSSQ 422
DB 440 YPEKKGKNCIAINTMDPFSRPIPLNKEQNLNYSNKKRPILETDQVEKVAIKDTNGNIT 499
QY 423 VVYCFNA-----DLKSPDSEDCGKTMT-----PDFTTGKYYTHIAGRDLEFKYTVKPR 471
DB 500 IAGDNGCITDEISAKTASIIYDNGNQMSKRYAAKDYTNPEDKTPNLVSKELALAYPDE 559
QY 472 DTDPTPL-----KHTRKYIEKGYREK--GOAIEYSGLETQURAAQ 513
DB 560 IEKDKGLFYNDQPIFEASVOSYUDEYTAQIRKQNDSTGSFKYVKMLDYVKEPPKMF 619
QY 514 AIYYFT--DSAELEDKLKDHY-----GFGDMNDSTLAVAKILEYVADSPPQLTDL 564
DB 620 TIKTSTLYDGGESDNTKIGNWYTYVVGNGTNGKQKQYSAKNGCAFTELSTESKNNLKKNI 679
QY 565 DFEIPNNKQYSLIGTOMHEDLVDIIRMEDKKEVIPPYHNLTKKT-----VTGLA 616
DB 680 DYVSLYKAKADSKVS-----VD-IEIDGQESI-VTDNITLDHVGYORINIILYPMLE 729
QY 617 GDRFKDFHFEIELEKNNKQELL-----SQYVKTQKTLFEKDKGATINLKHGSLTQGLPE 672
DB 730 GNEIN---TISIKDGGOTNVYWDVSEVEGAEEIEYKDPPOPIILBGD-PDFFGDPL 784
QY 673 GYSY-----LVKETDSE-GYKRVNSQEVANATVSKTGITSDE-TLAFENNK 717
DB 785 AVKYHDATYFIDSPILITQTPGTFSPFYKIVIGQRTVTVLSDSGSKKANRINDFKRVK 841

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Search completed: August 19, 2003, 15:30:28
Job time : 64 secs

